Dicite veritate, O magistri! Did you not roll your eyes when you received the administrative injunction to incorporate undergraduate research into your classrooms? Did you shake your head when the administration noted that STEM faculty members publish original research with their undergraduate researchers? Why, Oh Professor of Ancient Studies, can’t you do the same?

In my very unscientific survey of fellow classicists and ancient historians, I repeatedly hear of two major obstacles to mentoring undergraduate research. The first has to do with the definition of "research" and whether or not undergraduates are capable of contributing original ideas to the discipline. Newcomers often find staggering the number of skills and the level of proficiency required to contribute something new to our field. Our sources are not easily intelligible, even when they are translated. In most cases, ancient languages are the sine qua non for serious study of antiquity, but many of us also employ evidence that requires specialized knowledge such paleography, manuscript studies, epigraphy, or numismatics. How, then, my colleagues ask, can an undergraduate researcher with limited exposure to these skills contribute original research to our field?
The second obstacle concerns the lack of personal rewards or professional incentives. Many of us are juggling several course preparations while actively engaged in the research upon which our tenure and promotion rely. Others are adjunct instructors carrying heavy teaching loads while trying to write their way into tenure-track positions. Even if we found an undergraduate researcher who was proficient enough in languages to make a contribution to our field, she would require a great deal of mentoring to produce a short article for publication. And that's assuming that the student follows through with her research and doesn't just disappear for weeks at a time. Such an investment of time and effort pays few professional dividends either; undergraduate research tends to fall unnoticed between the teaching and research categories on our annual reports and tenure and promotion applications. These two obstacles often leave ancient studies faculty rolling their eyes when administrators sing the praises of our STEM colleagues and their undergraduate researchers funded by external grants. It's tempting to dismiss our administrators' exhortations towards undergraduate research as a failure to understand the complex nature of our studies or to feel resentment because we're already squeezed for time and money as it is; why volunteer to take on one more unpaid and unrewarded obligation?

In 2006, as a second year assistant history professor at the University of South Florida, those were certainly my objections to undergraduate research. That's when I met Susan Stevens who came to Tampa as a part of the Archaeological Institute of America lecture series. The morning after her lecture, we sat over a cup of coffee as she described how she had harnessed the skills of talented undergraduates to help her build and maintain her database of artifacts excavated in Carthage. She told me about one
particularly good researcher who was preparing to present her own interpretations based upon the Susan’s database at the 2011 annual meetings of the AIA.\footnote{In correspondence with Susan, she relates, “Indeed, my luck with undergraduate research has continued in a big way. The excavation report on a cemetery in Carthage in \textit{Journal of Roman Archaeology} Supl. Ser. 75 that I published in December ’09 had work by one undergrad and in 2007 another of my undergrads presented at National Conferences on Undergraduate Research in LaCrosse, Wisconsin in 2008. The same student, different project, will be presenting our summer research project at the American Philological Association Meetings in January 2011!”} Although Susan’s model for undergraduate research seemed to be working, I nonetheless met it with skepticism. Her interpretations were based upon the compilation and analysis of a dizzying number of artifacts, and I was astounded that she would trust undergraduates to enter and analyze her data. "Her undergrads at Randolph College must be way better than my USF students," I remember thinking. Either that or she was entrusting her academic reputation to a group of people who, in my experience, were more interested in beer pong than pondering their contribution to human knowledge. How could Susan ever be comfortable that their work wasn’t full of errors? She explained that she double-checked the data, but that the students did her a great service in simply entering artifacts into the database, becoming familiar with the evidence and then asking and answering their own questions of the data.

When Susan suggested that I too could benefit from working with undergraduate researchers, I nearly choked on my coffee. I cited the same obstacles that I’ve since heard my colleagues voice: our undergraduates don’t have the skills to help me in my work, and I don’t have time to train them; it would be more efficient for me to do the work myself, if only, only I had the time. But if I were really honest, I would have admitted that I didn’t really want to do undergraduate research. The term seemed to be a euphemism for the almost inevitably dissatisfying “honors thesis” or “independent study.” These
exercises usually involved a student approaching me with topics that lie well beyond my expertise. If I did agree to take her on and undertook the research needed even to point her in the right direction, too often the student floundered unproductively for weeks at a time. Too familiar was the student who ignored her project until late in the semester and turned in an unsatisfactory paper. Too often, I’d learned the hard way that even a good project would require me to spend additional weeks ironing out micro-level issues of form and rarely having the opportunity to engage with the student about the finer points of analysis and style. By the end of this "independent study," I was inevitably exhausted and exasperated, and the student felt like she'd been through the wringer. If this is what Susan meant by undergraduate research, I wanted no part of it.

Thus far, I have painted a very dark picture of undergraduate research in ancient studies, so black that you may well be surprised that I now attribute a significant portion of my academic success to that same thing: undergraduate research. Between the summer of 2008 and 2011, 20 student researchers and I built and published the Severan Database Project, three online databases containing thousands of records of inscriptions and imperial and provincial coinage from the age of the Severans, 193-235 CE. These databases were indispensible for researching my monograph on Julia Domna and the role of motherhood in Severan imperial ideology. Publishing that book ultimately won me tenure and promotion and, mirabile dictu, my undergraduate researchers played a significant role in helping me to compile, verify, and interpret those data. Because of the success of this pre-tenure experiment, I now spread the gospel of undergraduate research

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2 The Severan Database Project is available online at http://web3.cas.usf.edu/main/other/severan/
to my ancient studies colleagues, and I hope that in sharing my experiences I can inspire
you to do incorporate undergraduate research in- and outside your classroom.

If done with thoughtfulness and deliberation, there are numerous benefits to
undergraduate research for our students and ourselves. When we invite students to ask
their own questions, we foster active and motivated learning and we empower them to
become _bona fide_ members of our discipline and intellectual community. When we
include them in our research, students profit from our expertise by learning to model our
methodology, but better still, they experience the rush of excitement and discovery that
inspires them to find their own answers. Vital to the process is the opportunity for
researchers to present their findings before their colleagues and the broader university
community. These presentations increase the visibility of our profession and educate our
administrators about the centrality of our studies to higher education – just the kind of
publicity we need to keep our disciplines healthy and relevant. Finally, by publishing
with our undergraduate researchers, we tear down barriers to cooperative learning while
launching young people into the world who will be advocates for our discipline and the
humanities in general.

So, where to begin on this deliberate and thoughtful journey that will improve the
quality of engagement with our students, improve our research and win us advocates for
our disciplines? Undergraduate inquiry finds its genesis in the classroom. You may well
be the first archaeologist, historian or classicist whom your students encounter, and it is
likely that they have no idea what you do outside the classroom. My students tell me that
my best classes are those in which I discuss my current project, and when I think back on
it, I thought the same thing about my professors as an undergraduate. I loved to see my
professors' excitement as they posed their questions, explained their evidence and methodology, then offered their interpretations, and I think my students feel the same way about me. This performance of our profession empowers students because it unveils the mystery of what we do when we’re not teaching. More importantly, students witness firsthand the dynamic aspect of scholarship because we demonstrate how many questions remain to be answered, and we model for them how to go about answering those questions.

Inspiring them is the easy bit, you may be saying. How can I teach students to write well and hone their research skills while also covering content? How do I avoid the disastrous senior theses or independent studies? I believe the answers lie in abandoning the tyranny of content in favor of hands-on exercises that allow invite students to hone analytical and writing skills. Ask yourself what you really want your student to remember ten years from now. Is it the date of Caesar’s death? Or how to weigh and analyze evidence? Must he know the ins and outs of the *cursus honorum* and the Roman constitution, or is it more desirable that he knows how write an argumentative essay and support up his thesis with the responsible use of evidence? When we scaffold our courses in such a way as to hone analytical and writing skills while mastering smaller units of content, we create in our students not simply the hunger for knowledge but also the ability to answer their own questions even after they've left our classrooms. The poet Lucretius famously employed poetry to teach boys Epicurean science; it was like honey that coats the rim of the cup of wormwood, making the science easier to swallow and thus curing the boys of their fear of death (Lucr. *DNR* 1.931-50). I propose that the content of our disciplines is the honey that makes the higher skills-based approach easier
to swallow. Adopting scaffolding in our courses will train the kind of researchers whom you want to assist you in your work.

In the initial stages of my career, I had to swallow some bitter wormwood of my own. As a freshly minted PhD in Classics, I had somehow landed a tenure-track position in a History department. This shift to a sister discipline, one related to my training but with some distinct differences, gave me the unusual opportunity to think seriously about fundamental questions of teaching and learning. Over the course of several semesters, I worked out a progression of skills I wanted to teach students at every level. I began by identifying the skills that I wanted my senior capstone seminar students to exhibit in their 15-25 page argumentative essays and then worked backwards, distributing the skills across freshman-, junior- and senior-level courses. By the time students completed these seminars, I wanted them to have mastered the following skills:

- Weighing contradictory or problematic evidence to justify privileging one source over another
- Interpreting a variety of ancient evidence – textual, numismatic, artistic and epigraphic
- Citing ancient and modern sources properly
- Identifying the thesis in a book or an article
- Critiquing an author's argument based upon the ancient evidence that the author employed
- Writing an argumentative essay in which they employed ancient evidence and addressed modern scholarship on the topic
From this set of desired skills, I worked backward through my course offerings to find the most appropriate opportunity for reinforcing micro-levels of form such as grammar, style and the like while also honing analytical skills. What follows in the next several paragraphs is the plan I now employ.

For my freshman-level survey of Romulus to Constantine, I developed document labs, exercises in which I compile several pieces of primary evidence on a particular question. Document labs allow students to concentrate immediately on weighing evidence and analyzing ancient sources. When considering the historicity of the Romulus and Remus story, for example, I composed a document lab that contained passages from Livy Book I, an image and description of the 5th C BCE Capitoline She-wolf, and a 3rd C BCE didrachum minted for Rome that features Hercules on the obverse and a she-wolf with twins and the legend ROMANO on the reverse (Cr. 20/1). After the freshmen in my survey course studied this evidence, I asked them to determine the usefulness and limitations of each source to determine the historicity of the myth. There are always several students who fall into the trap of accepting the historicity of she-wolf because all the evidence in the lab points to its existence, or more precisely, to the importance the Romans assigned to the story. The exercise is useful because it calls attention to our modern distinction between myth and history, a distinction that ancient peoples did not always recognize. The documents also highlight the importance of stories in constructing national identity; sometimes it doesn’t matter whether the story is true or not so long as the people who tell it accept it. I next ask the students to write up a three-page paper in which they offer their interpretations, supporting their arguments with the ancient evidence I supplied them. As part of the preparation for writing the paper, I explain the
conventions for citing ancient evidence properly. Since there are no footnotes to trip them up, students can easily grasp and employ these conventions. Students complete four document labs over the course of the semester, two in the form of take home assignments and in two in-class exams. As an alternative to taking the final exam, students may create their own document labs from the wide variety of ancient evidence that we have encountered over the course of the semester. They must run their topics by me for approval, then write an argumentative essay based upon that evidence. Because I share my own research in class and because students complete document labs, I am satisfied that even if a student never takes another ancient studies class, he nonetheless understands the nature of ancient evidence and the basic methodologies of our profession. If I see him again the next semester, I’ll build upon his analytical and writing skills by introducing him to secondary scholarship and eventually teaching him to find his own ancient evidence.

Junior-level topics courses also employ document labs as well as one-page article reviews which I call “reading notes.” To complete this exercise properly, students must first cite the article according to the *Chicago Manual of Style* 16th edition, then identify the thesis in no more than three sentences.⁴ They then summarize the evidence for the thesis and in a final paragraph, include their reaction to the article’s argument. I designed this exercise to teach students both how pick out the argument of an article and weigh the author’s use of evidence. Doing so is the natural next step for budding researchers; as students in the freshman-level course, they have already learned to analyze and interpret ancient documents; reading notes allow them to see how other scholars in our field

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handle evidence. In this course, students also write their own document labs as their final project. In order to do so, they must learn how to develop a question that can be answered adequately in three pages. But they must also use at least two pieces of ancient evidence that they have found on their own. To that end, I hold class in the library three weeks before classes end. There, I teach students how to find textual, numismatic and epigraphic evidence for their projects. I reinforce the lesson with a library worksheet that asks the students to find and properly cite ten bits of evidence. The final document lab represents all the work of required for an argumentative research essay without actually writing the paper itself.

Finally, in the capstone seminar, students meet for eight weeks to discuss ancient texts and several scholarly articles that I have selected on a particular topic. For each meeting, students write one set of reading notes and compile a bibliography of modern scholarship on the topic. Students are allowed to use five bibliographic entries from their readings, but they must use WorldCat, L’Année philologique or Google scholar in order to sharpen their research skills and learn to find material on their own. The first class is held in the library where students sign up for interlibrary loan accounts and learn about bibliographic software (my favorite is Zotero because it’s free and easy to master). I also teach them how to format a bibliography and lay hands on a book or article located on the shelves. After an additional seven weeks of meetings, students begin their own argumentative research paper. In individual meetings, I help students develop a manageable topic. After two weeks, students turn in a one-page abstract that includes a tentative thesis and bibliography of ancient and modern sources. I return these quickly, complete with comments on where to go next, what’s missing, what’s good and what
needs to be improved. At the end of the semester, I invite the students to my home, feed them dinner and give each student ten minutes to present her findings to her colleagues and invited faculty. When my students stand up to present their findings, they exhibit the kind of confidence that only comes from a well-researched project. This is a magical night, when the student audience is just as engaged in the presenter’s project as they are in their own. Finally, they stop looking to me for encouragement and speak to one another. A number of these students (to my mind, not nearly enough) submit their papers for presentation at the USF Undergraduate Research Symposium.

So where does undergraduate research begin in my scaffolding scheme? Most of our colleagues would identify the seminar paper and presentation as research. Yet I would argue that research begins at the freshman-level course, when students cherry-pick from the ancient sources I provided for them throughout the semester to form their own theses for the final document lab. True, the products they produce are not publishable in our professional journals: their papers are too short and seldom offer original insights into a particular question; they employ limited ancient sources, almost always in translation. Yet these student papers also demonstrate analysis and the weighing of ancient evidence that has been properly cited. The findings that students reach may not be new to us, but they are new to them. They come to their conclusions by themselves based on their own analysis of ancient evidence – to my mind, that’s research! Yet undergraduate research need not be confined to a classroom either. The scaffolding that I have just described endows freshmen and junior-level students with most of the tools they need to assist me with my research.
“Hold on,” you might be saying. “What happened to all the languages? To iconography, numismatics, epigraphy, textual analysis?” I was asking myself similar questions several weeks after I had chatted with Susan Stevens – how could I possibly teach such a variety of skills to undergraduates? My answer came one day in my junior-level Roman Empire course. I had placed an image of an aureus on the screen featuring a bust of Septimius Severus on the obverse and on the reverse, Severus riding a horse and trampling a Parthian warrior underfoot (RIC 4a.146b, 109). The reverse legend read VIRTVS AVG[VSTI]. Before I could comment on the coin, I heard a student laugh in the back of the room. I turned to see what the commotion was, only to realize that he was laughing at the coin. When I asked him why, he explained, “Well, considering that Severus had just mucked up the war against the Parthians, I think it’s pretty funny that he’s going around advertising how manly he is.” I blinked, dumbfounded. That USF undergraduate history student in the back of the room who had no Greek, very little Latin, and no training in art history or numismatics had just offered a rather sophisticated interpretation of a coin that I hadn’t even encountered before I was a PhD candidate.

“He must be a genius,” you’re thinking – and that’s what I was thinking too. My next thought was how I could convince him to help me with my databases that I needed to build in order to analyze Severan provincial and imperial coinage. But as the days passed, I started to notice that quite a number of my students could offer similarly sophisticated interpretations if I properly contextualized a coin. Where had they learned to read legends and interpret images? How did they know to be critical of the propaganda on coinage? Where did they learn that the historical context in which a coin was produced often sheds important light on its messages? The answers to these questions
must be obvious to you, but they were not obvious to me at the time. Those students knew how to handle coinage because I had taught them how without even realizing it. They watched me interpret coinage in virtually every class; they learned the most important iconography, numismatic terminology and legend abbreviations because I treated these skills as if they were common knowledge, no big deal, everybody who studies ancient Rome knows this stuff. Those plucky undergraduates had no idea that they weren’t supposed to know how to do this level of analysis until (or if) they reached graduate school. And note too that they were most engaged in Severan material, my specialty. This led to another equally important realization: they care about what I’m doing because they have a front row seat to see what I’m researching.

These two important realizations caused me to rethink entirely my approach to undergraduate research. The second realization, that students care about what I’m studying, led me to realize that I could steer potential researchers towards my period of expertise, the Severan period. It’s a period that is understudied and has a great deal to offer a researcher interested in architecture, literature, numismatics, religion, gender or ethnicity. This realization gave me permission to throw off the tyranny of content in my courses and think about how to harness the energy of undergraduate researcher. To make a meaningful contribution to our discipline, undergraduate researchers need not have mastered all the skills we learned in graduate school and certainly not to the same level of sophistication. But as that student in the back of my classroom demonstrated, they can master enough of those skills to get them started on a limited body of evidence. That is, instead of demanding that students have formal training in languages, history and specialized fields before they began to research with me, I simply asked that they
complete a junior-level course and be willing to learn a handful of Greek and Latin words to interpret provincial and imperial coinage.

Once I realized these two things, I started recruiting students to help me build a database of provincial coinage minted by several important eastern cities ruled by Rome. I wanted to understand better the relationship between Rome and these cities; I envisioned comparing the messages produced by the imperial administration on gold and silver specie with the messages that appeared on bronze coinage minted under the authority of provincial and civic authorities. I believed that through a comparison of provincial and imperial coinage, I could establish a negotiation of ideology between the imperial administration and provincial and civic elites. This task is bigger than it sounds. To find all the coins a particular city minted under Severus, a scholar has to consult dozens of volumes of the *Sylloge Nummorum Graecorum*. This series is made up of catalogs representing the modern coin collections of cabinets across the United States, Europe and Turkey. Thus, I could consult the *SNG France* and find only those Ephesian coins produced under Severus that were held by the Bibliothèque nationale de France. In the summer of 2007, I went to the American Numismatic Society, to photograph coin and coin descriptions from every volume of the *SNG* for 14 eastern cities. The next step was to organize those coins into a database. I hoped that undergraduate researchers would enter the data and images of each coin into a record that could then be proofed and analyzed.

But there was another wrinkle in my plan. Coin cabinets, of course, publish in the vernacular. So really, if I wanted to investigate thoroughly all the coins of Ephesus whose legends are written in ancient Greek, I also had to know French, Spanish, Italian and
German. How to overcome this barrier for undergraduate researchers? As I’ve already demonstrated, a researcher need know only a handful of ancient Greek or Latin to be able to understand the inscriptions on the coins, but to understand the catalog entries, she must understand those modern languages as well. “Or maybe just one,” it suddenly occurred to me. If I recruited a student who studied a little German, I could assign her the SNG Berlin to translate and then enter the data and images into my database. Once the catalog entries were in English, voilà! The student who had studied French would be able to access coins in the Berlin cabinet, and vice versa. In preparing researchers to work on my project, I didn’t water down the difficulty of the tasks. Researchers still need a battery of skills, but the way that I sliced and diced my research made it more accessible for undergraduate researchers.

The next challenge was to make the experience profitable for my undergraduates. At the first meeting of the Severan Database Project, I introduced the researchers to the database template, divided up data entry assignments based upon the students’ modern language capabilities and most importantly handed out journals for them to keep. I asked the students use the journals to track the time they spent on the project, to jot down any questions they might encounter and keep a special section to record notes on any coins or iconography they found particularly interesting. From there, I met with students individually to narrow their interests and point them towards bibliography. Two researchers, Shannon Ness and Anne Leon, presented their projects at the 2009 USF Research Symposium, and they received first and second places in the Humanities division. Anne landed a fellowship in the Classics Department at University of Kansas in large part based upon her research and the letter I was able to write on her behalf.
It was perhaps due to Shannon's and Anne's tangible rewards that my best students scrambled to land positions on the Severan Provincial Coinage database team. The same students whom I had thought were more interested in weekend parties turned out to be eager for intellectual stimulation, looking only for a mentor to guide them. In the second year of the project, I received 10-15 applications to fill five positions. In those first two years, the USF Office of Undergraduate Research paid these students $1200 for 120 hours of work, but when an administrative change led to those funds being directed elsewhere I fully expected the applications for the next year to dry up. However, when I advertised in my classes that I would again accept applications for five undergraduate researchers to work on my database and I would in turn assist them in their own related projects, I received just as many applications for the third and successive years. I had occasion to ask some of those former undergraduate researchers recently why they were so eager to be a part of the team. They cited the opportunities to present at the research symposium, to work closely with a faculty member who was passionate about her work and perhaps most significantly, their enjoyment of the camaraderie of their team members as they worked together and increasingly played together. As I worked by their side, I confess that it was difficult at times to distinguish their work from their play. When we gathered, the flow of ideas was fast and furious, often accompanied by bouts of laughter and exclamations of discovery in making connections they'd never seen before. In 2011, I shifted the emphasis from numismatics to epigraphy, and along with two graduate students, the undergraduate researchers and I built the Inscriptions of Julia.

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Domna, a database also housed in the Severan Database Project. These two databases formed the basis for the book that won me tenure and promotion, and I was successful in this because I had found a way to make undergraduate research work for me and my students.

After the summer of 2011, I suspended work on both databases in order to finish my monograph and some lingering projects. Engrossed in my own work, I was not prepared to take on another undergraduate researcher, but in the fall of 2012, when one of my most talented but introverted students approached me with request to advise her Honors thesis, I couldn’t turn her away. Jenni Royce initially wanted to research Trajanic empresses, but she wasn’t so committed to the topic that she couldn’t be guided. I explained that there was a loose end from my recent monograph that I wanted to chase down and I believed that there could be an article in it. If she were interested in working on that project, she could use a portion of our research for her Honors thesis, and the remaining work we could publish together. She understood the value of what I was offering her, I think, because she seized the opportunity with both hands and cheerfully helped me hunt down inscriptions and work our way through coin catalogs before settling down to analyze our data. In April 2013, Jenni presented a portion of her Honors thesis at the Harvard University Center for Hellenic Studies before seven other student researchers and the fellows. 6 I flew up to lend my support, but in truth, I hardly recognized her as she launched into her presentation. Gone was the halting uncertainty and the panicked glances in my direction seeking affirmation. She seemed taller somehow as she slipped

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on the mantle of *auctoritas* that naturally accompanies the completion of a well-researched project. Witnessing this transformation, I couldn't help but get a little choked up. In our profession, this is as good as it gets!

The challenges that we ancient studies faculty face in sharing our research agenda with undergraduates are formidable. Our studies are complex. Some of us undertake philological projects that are only possible after years of studying Latin and ancient Greek; we all need several modern languages in order to read scholarship in our fields; many of us employ methodologies that require specialized training beyond graduate school. But as I have shown above, even technical and obtuse research can be divided in such a way that both faculty and students can benefit from undergraduate research. Students enjoy hearing about our work; when we discuss with them the issues we’re investigating, our enthusiasm can inspire and empower them to ask their own questions. This model works especially well when we scaffold our courses and programs to abandon the tyranny of content in favor of developing higher-level cognitive skills. Introducing undergraduate research into the classroom pays rich dividends and allows our students to apply what they have learned concerning writing, analysis and research methods to the questions that they tackle with their mentors. The experience is invaluable for our researchers, even for those who will not follow their professors into academia. But in fact, whether they do or not is immaterial. Just working beside us is sure to win well-read, well-spoken advocates for our disciplines, who can personally bear witness to the value of analysis and research in the Humanities. And those are advocates to whom I’m willing to entrust our future.